



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D6101-015
Job Sheet 174900



5076274

Part No: D6101-015

Job Qty: 10 ea

Part Name: Saddle Billet



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 3/23/18

Job Tracking No:

Due Date: 4/3/18

Created By: Michelle Gagnon-Donovan

Type: SOLD

Description:

Note: DWG REV B IPP RevA: New issue DD verified by:EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	10 pcs		4/3/18	0.00	0.00	Purchasing		MAY 3 1 2018
110	Packaging	10 pcs		4/3/18	0.00	0.00	Packaging2		MAY 3 1 2018
120	QC	10 pcs		4/3/18	0.00	0.00	QC18		MAY 3 1 2018
130	Packaging	10 pcs		4/3/18	0.00	0.00	Packaging3-2		DAS 21 JUN 0 7 2018
140	QC21-SA	10 Ea		4/3/18	0.00	0.00	QC21		

Part Op 100 - Issue P/O: 39392 b) 9.450" x 6.250" x 2.50" thick (+0.030 / -0.000) d) Grain direction along 9.450"

Descriptions: length

110 - Ensure material certification is attached

120 - Ensure Material certification comply to Dwg D6101

130 - LOCATION: MAT045

MAR 23 2018

DAS
13
9-89

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D6101-015P	Aluminum Billet	10 pcs (1 ea)	100-Purchasing	

Job Allocations

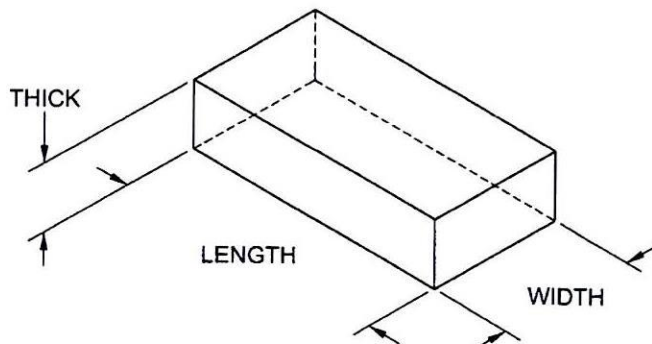
Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	D6101-015P	10	0	0

Part Specifications

Specifications could not be found.

Plex 3/23/18 8:18 AM Dart.Gagnon.Michelle

SPECIFICATION CONTROL DRAWING



PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH x WIDTH x THICK (+0.030/-0.000), AND GRAIN DIRECTION AS SHOWN.

TOLERANCES ON ALL DIMENSIONS ARE +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES.

B ACCEPTABLE SPECIFICATIONS FOR 7075-T7351 ALUMINUM ARE AMS-QQ-A-250/12, QQ-A-250/12, OR ASTM B209

Part No.	Alloy	Length	Width	Thick	Grain Direction
D6101-001	7075-T7351 (QQ-A-250/12)	6.000	6.250	2.000	Along 6.000 Length
D6101-003	7075-T7351 (QQ-A-250/12)	7.875	6.250	2.000	Along 7.875 Length
D6101-005	7075-T7351 (QQ-A-250/12)	5.000	8.250	2.500	Along 5.000 Length
D6101-007	7075-T7351 (QQ-A-250/12)	7.750	8.250	2.500	Along 7.750 Length
D6101-009	7075-T7351 (QQ-A-250/12)	8.700	8.250	2.500	Along 8.700 Length
D6101-011	7075-T7351 (QQ-A-250/12)	9.700	8.250	2.500	Along 9.700 Length
D6101-013	7075-T7351 (QQ-A-250/12)	10.100	8.250	2.500	Along 10.10 Length
B D6101-015	7075-T7351 (QQ-A-250/12)	9.450	6.250	2.500	Along 9.450 Length
D6101-017	7075-T7351 (QQ-A-250/12)	6.350	6.250	2.250	Along 6.350 Length

RELEASED
09/07/15/W

B	ADDED D6101-015/-017, ADD ASTM B209	RF	09.04.23
A	NEW ISSUE	CP	01.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D6101	SHEET 1 OF 1
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	SADDLE BILLET, 7075	NTS
DATE	09.04.23	COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: 06101-015
 DATE: MAY 31 2018

PO / BATCH NO.: 039392 / 5076767

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 10 PCS
 QUANTITY INSPECTED: 10 PCS
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 2.500
 THICKNESS RECEIVED: 2.500
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<u>(N)</u>	
CORRECT FINISH	<u>(Y)</u>	N	
CORROSION	Y	<u>(N)</u>	
CORRECT GRAIN DIRECTION	<u>(Y)</u>	N	
CORRECT MATERIAL PER M-DRAWING	<u>(Y)</u>	N	<u>QA A-250/12</u>
CORRECT THICKNESS	<u>(Y)</u>	N	
PHOTO REQUIRED	Y	<u>(N)</u>	
CORRECT REF # TO LINK CERT	<u>(Y)</u>	N	<u>Heat # 9411475</u>
CORRECT MATERIAL IDENTIFICATION	<u>(Y)</u>	N	
CORRECT M# ON THE MATERIAL	<u>(Y)</u>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<u>(N)</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<u>(N)</u>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS</u> DATE: <u>11 MAY 31 2018</u> <u>9-89</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

**Castle Metals®**

A. M. Castle & Co.

PACKING SLIP/
CERTIFICATE OF CONFORMANCE

Page 1 of 2

Shipment No:3561461

Ship From: A. M. CASTLE & CO. 2150 ARGENTIA ROAD MISSISSAUGA, ON L5N 2K7 CAN		Sold To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA		Ship To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CAN		Deliver To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA	
Date Shipped	F.O.B.	Freight Terms		Carrier		BOL No	
06-APR-18	ORIGIN	Prepaid		MANITOULIN		3561461-2	

Shipment Details			Final Destination Branch - TOR				
Order No	Line No	Item No	Description				
5086207	1	752241.MO	2.5000.PL.7075.T7351.ALUMINUM.USI.48.5000.144.5000 CUT 2SIDED TO 6.25 IN (+ .0310/- .0000 IN (GRAIN TO RUN ALONG 9.45")) X 9.45 IN (+ .0310/- .0000 IN (GRAIN TO RUN ALONG 9.45")) - ALUMINUM PLATE SAW SPECIFICATIONS: AMS-QQ-A-250/12				
Purchase Order No		Part Number	Ordered Qty		Invoice Qty		
39392		YOUR ITEM NUMBER: D6101-015	10.00 PCS		10.00 PCS		
Details		ALL PAPERWORK MUST FOLLOW ORDER / CUSTOMER MUST RECEIVE AT TIME OF DELIVERY ALL MATERIAL MUST HAVE IDENTIFYING MARKINGS EX:HEAT #S Email P/s and certs to: clavoie@dartaero.com END USER: DART AEROSPACE END USE: COMMERCIAL AIRCRAFT PARTS					
Delivery No.	Mill/Source	Heat Number	Mech Id	PCS	Width (IN)	Length (IN)	Shipped Qty(LBS)
121725829	CONSTELLIUM ROLLED PRODUCTS			10			152.7121

We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer cannot be returned for credit.

Date Printed: 06-APR-2018 03:04:07 PM



Castle Metals®

A. M. Castle & Co.

PACKING SLIP/
CERTIFICATE OF CONFORMANCE

Page 2 of 2

Reviewed by Authorized Castle Metals Representative:

Date:

Name:

APR 06 2018



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 A M CASTLE CO
 3050 SO HYDRAULIC
 WICHITA KS
 67216
 US

 S
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D
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O

 A M CASTLE
 1420 KENSINGTON ROAD, SUITE 220
 OAK BROOK IL
 60523
 US

A M CASTLE 110626794 4776 INCLUSION Serial:20180219-0110626794 Pg 1of2

 CUSTOMER PURCHASE ORDER NO. & ITEM
 453752

 Constellium ORDER NO.
 232823

ALLOY	CLAD	TEMPER	GAUGE	WIDTH	LENGTH
7075		T7351	2.50000 in 63.50 mm	48.50000 in 1,232 mm	144.50000 in 3,670 mm

 ITEM ORDERED
 SPEC PLATE, SAWED
 MILL FINISH

 CUSTOMER SPECIFICATION
 AMS 4078J

PART NUMBER	B/L NUMBER	DATE SHIPPED
752241	95019	02/19/2018

WT. SHIPPED	NO. OF PIECES	GOVT. CONTRACT NO.
7140.000 LB	000004	

CERTIFICATION
 "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination."
 Constellium Rolled Products Ravenswood, LLC
 859 Century Road
 P.O. BOX 68
 RAVENSWOOD, WV 26164 USA

Dave Dunbarger - Laboratory Manager

ALL LOTS ON THIS CERTIFICATION ALSO CONFORM TO THE FOLLOWING REQUIREMENTS:

 ASTM B594 REV 13 2013 100% SONIC W/ 0.125"DEADZONE Class A
 AMS QQ-A-250/12A
 AMS-STD-2154A 2012 TYPE1 CLASS A 100% SONIC MINUS DEADZONE
 ASTM B209-14
 BSS-7055B 2013 CLASS A 100% SONIC TESTED MINUS DEADZONE
 CMMP025 REV U
 CSTI006 REV E 2011 CLASS A 100% SONIC MINUS DEADZONE
 DPS 4.713 REV AK 2012 CLASS A 100% SONIC MINUS DEADZONE
 GAMPs 9101 REV B 2006 CLASS A 100% SONIC MINUS DEADZONE
 MMS 159T
 PS 21211P 2010 CLASS A 100% SONIC MINUS DEADZONE

Load Details

Package	Net Lbs	Kg	Lot	Piece	Serial	Parent Lot
1001713156	1,785.000	809.662	9411475	01		
1001713156	1,785.000	809.662	9411475	02		
1001713157	1,785.000	809.662	9411475	03		
1001713157	1,785.000	809.662	9411475	04		

Lot: 9411475 (See test results below)
Tensile - Room Temperature (US)

		Ultimate (KSI)		Yield (KSI)		Elongation (%)		Report
Direction	Tests	Min	Max	Min	Max	Min	Max	
LT	02	74.0	74.1	63.1	63.1	12.0	12.0	



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 A M CASTLE CO
 3050 SO HYDRAULIC
 WICHITA KS
 67216
 US

 S
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O

 A M CASTLE
 1420 KENSINGTON ROAD, SUITE 220
 OAK BROOK IL
 60523
 US

A M CASTLE		110626794		4776		INCLUSION		Serial:20180219-0110626794		Pg 2of2																												
CUSTOMER PURCHASE ORDER NO. & ITEM 453752						Constellium ORDER NO. 232823			CERTIFICATION "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC 859 Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA  Dave Dunberger - Laboratory Manager																													
ALLOY 7075	CLAD	TEMPER T7351	GAUGE 2.50000 in 63.50 mm	WIDTH 48.50000 in 1,232 mm	LENGTH 144.50000 in 3,670 mm																																	
ITEM ORDERED SPEC PLATE, SAWED MILL FINISH																																						
CUSTOMER SPECIFICATION AMS 4078J																																						
PART NUMBER 752241			B/L NUMBER 95019		DATE SHIPPED 02/19/2018																																	
WT. SHIPPED 7140.000 LB		NO. OF PIECES 000004		GOVT. CONTRACT NO.																																		
Tensile - Room Temperature (St) <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th colspan="2"></th> <th colspan="2">Ultimate (N/MM2)</th> <th colspan="2">Yield (N/MM2)</th> <th colspan="2">Elongation (%)</th> <th>Report</th> </tr> <tr> <th>Direction</th> <th>Tests</th> <th>Min</th> <th>Max</th> <th>Min</th> <th>Max</th> <th>Min</th> <th>Max</th> <th></th> </tr> </thead> <tbody> <tr> <td>LT</td> <td>02</td> <td>510</td> <td>511</td> <td>435</td> <td>435</td> <td>12.0</td> <td>12.0</td> <td></td> </tr> </tbody> </table>														Ultimate (N/MM2)		Yield (N/MM2)		Elongation (%)		Report	Direction	Tests	Min	Max	Min	Max	Min	Max		LT	02	510	511	435	435	12.0	12.0	
		Ultimate (N/MM2)		Yield (N/MM2)		Elongation (%)		Report																														
Direction	Tests	Min	Max	Min	Max	Min	Max																															
LT	02	510	511	435	435	12.0	12.0																															
Conductivity % IACS MIN 40.0 MAX 40.2 % MS/M MIN 23.2 MAX 23.3																																						
Chemistry (Actual) <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th></th> <th>SI</th> <th>FE</th> <th>CU</th> <th>MN</th> <th>MG</th> <th>CR</th> <th>ZN</th> <th>TI</th> <th>ZR</th> </tr> </thead> <tbody> <tr> <td>Core</td> <td>0.06</td> <td>0.13</td> <td>1.45</td> <td>0.05</td> <td>2.58</td> <td>0.21</td> <td>5.63</td> <td>0.04</td> <td>0.00</td> </tr> </tbody> </table>													SI	FE	CU	MN	MG	CR	ZN	TI	ZR	Core	0.06	0.13	1.45	0.05	2.58	0.21	5.63	0.04	0.00							
	SI	FE	CU	MN	MG	CR	ZN	TI	ZR																													
Core	0.06	0.13	1.45	0.05	2.58	0.21	5.63	0.04	0.00																													
OTHERS-EACH: .05 MAX. OTHERS TOTAL: .15 MAX. AL REMAINDER																																						
All material contained in this lot was cast and manufactured in the USA																																						
QUALITY TEXTS: AMC CA-15413B R 6																																						
THIS TEST REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY OR AUTHORIZED QUALITY DELEGATE. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. CHEMISTRY BY OES: ARKSPARK CHEMISTRIES REPORTED IN PERCENTAGE BY WEIGHT WHEN FRACTURE TOUGHNESS TEST REQUIRED, TESTED PER ASTM E399 WHEN TENSILE TEST REQUIRED, TESTED PER ASTM E8; B557 DUNS Number: 090570149; CAGE Code: 1YWL9 Mercury is not a normal contaminant in aluminum alloys and neither mercury nor any of its compounds were utilized in the manufacture of our product. "END OF CERTIFICATION"																																						
																																						